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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,209	01/12/2001	Michael Gough	60333-302802	2681

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EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 04/28/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,209

Applicant(s)

GOUGH, MICHAEL

Examiner

Eron J Sorrell

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 7, 8, 12, 13, 19-21, 25, 26, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson (U.S. Patent No. 6,681,116).

3. Referring to system claim 1, method claim 19, and apparatus claim 28, Johnson teaches a system, method and apparatus for accelerating data transfer between networked databases comprising:

a plurality of databases coupled by a network (see lines 9-30 of column 6); and

at least one laser unit coupled to each database for communicating data between the databases via free space by way

Art Unit: 2182

of a laser beam at a rate faster than that which the network is capable (see lines 9-30 of column 6).

4. Referring to system claim 2 and method claim 20, Johnson discloses the network comprises a router (see items labeled "ROUTER" in figure 3).

5. Referring to system claim 3 and method claim 21, Johnson teaches the network is an Ethernet (see lines 32-39 of column 1).

6. Referring to system claim 7 and method claim 25, Johnson discloses the laser unit comprises a receiver and a transmitter (see lines 23-41 of column 2).

7. Referring to system claim 8 and method claim 26, Johnson teaches the databases are positioned in a single housing (see lines 1-7 of column 6).

8. Referring to system claims 12 and 13, Johnson teaches the laser units communicate the data between the databases upon a rate of the communication exceeding a predetermined amount to a

Art Unit: 2182

single address in one of the database (see lines 50-59 of column 1).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson.

11. Referring to claims 10 and 11, Johnson fails to explicitly set forth the limitation that the housing has a substantially hemispherical configuration or a substantially spherical configuration.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Johnson such that the housing is substantially hemispherical or substantially spherical as the shape of the housing is a matter of mere design choice.

Art Unit: 2182

12. Claims 4-6,14,16-18, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Bloom (U.S. Patent No. 6,323,980).

13. Referring to system claims 4-6 and method claims 22-24, Johnson fails to teach each a plurality of laser units being mounted on the database and move with two degrees of freedom.

In an analogous system and method, Bloom teaches a plurality of laser units being mounted on computers that move with two degrees of freedom (see lines 1-20 of column 2, lines 39-55 of column 3 and paragraph bridging columns 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system and method of Johnson with the above teachings of Bloom. One of ordinary skill in the art would have been motivated to make such modification in order to provide a clear line of sight between the laser transceivers as suggested by Bloom (see paragraph bridging columns 3 and 4).

14. Referring to claim 14, Bloom teaches the laser units are movably positioned into alignment prior to communicating (see paragraph bridging columns 3 and 4).

Art Unit: 2182

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Johnson with the teachings of Bloom in order to ensure the proper transceivers are able to communicate.

15. Referring to claim 16 and 17, Bloom teaches the laser beam of the laser unit is traced prior to the laser units communicating the data in order to determine whether the laser units are capable of communicating the data and wherein an alternate path for the laser beam is determined if the trace is unsuccessful (see paragraph bridging columns 5 and 6).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Johnson with the above teachings of Bloom. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to ensure the transmitter and receiver are physically capable of communicating via the laser unit.

16. Referring to claim 18, Johnson discloses carrying out communication with the network if the communication is unable to be carried out via the laser units (see lines 31-45 of column 6).

Art Unit: 2182

17. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Pasanen (U.S. Patent No. 6,587,450).

18. Referring to system claim 9 and method claim 27, Johnson fails to teach the housing has a reflective surface positioned therein for reflecting the laser beam between laser units.

Pasanen teaches using a reflective surface to carry out transmission of laser beams from a source to a destination (see paragraph bridging columns 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Johnson with the above teachings of Pasanen. One of ordinary skill in the art would have been motivated to make such modification in order to maximize the possibilities a source and a destination can communicate.

19. Claim 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Bloom as applied to claim 14 above and further in view of Wood, Jr. (U.S. Patent No. 6,466,771).

Art Unit: 2182

20. Referring to claim 15, The combination of Johnson in view of Bloom fails to teach the limitation of movably positioning the laser unit based on a look-up table.

Wood, Jr. teaches a system wherein a look-up table is used for positioning the wireless devices for communication (see lines 28-40 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Johnson and Bloom with the above teachings of Wood, Jr. One of ordinary skill in the art would have been motivated to make such modification in order to quickly determine the positions of the destination.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references have been cited to further show the state of the art as it pertains to networks comprising laser units:

U.S. Patent No. 5,953,507 to Cheung et al. is cited as it shows a network with both wireless and Ethernet interfaces; and

U.S. Patent No. 6,701,092 to Doucet et al. is cited as it shows a laser based communications network.

Art Unit: 2182

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on 703 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EJS
April 15, 2004


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
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